VIRGINIA DEPARTMENT OF TRANSPORTATION NPDES MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PROGRAM & NPDES CONSTRUCTION PROGRAM INSPECTION REPORT

VIRGINIA DEPARTMENT OF TRANSPORTATION
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Field Activity Dates: October 22–26, 2012

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U.S. Environmental Protection Agency, Region III
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THE INSPECTION INCUDED, BUT IS NOT LIMITED TO, REVIEW OF THE FOLLOWING DOCUMENTS

Shortened Name	Document Title and Date
Permit	Virginia Department of Conservation and Recreation (DCR) *General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems*, General Permit No. VAR04 (Permit Registration No. VAR040115), effective July 9, 2008
EPA Records Request	List of documents that the EPA Inspection Team requested from VDOT on October 10, 2012 and October 26, 2012
VDOT Response Inventory	Inventory of documents provided by VDOT in response to the EPA Records Request
Year 3 Annual Report	VDOT's *MS4 Year Three Progress Report July 1, 2010 to June 30, 2011*
Industrial General Permit	VPDES Industrial Stormwater Permit (VAR05)
VDOT ESC and SWM Standards and Specifications	VDOT Erosion and Sediment Control and Stormwater Management Standards and Specifications
MS4 Registration Statement	VDOT Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Small MS4 /Serving the Urbanized Areas of Virginia/ Part I/ Registration Statement / July 1, 2008 to June 30, 2013
MS4 Implementation Plan	VDOT Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Small MS4 /Serving the Urbanized Areas of Virginia/ Part II/ Implementation Plan/ July 1, 2008 to June 30, 2013

ACRONYMS AND ABBREVIATIONS USED IN REPORT

Abbreviation	Corresponding Term
BMP	best management practice
CEDAR	comprehensive environmental data and reporting system
DCR	Virginia Department of Conservation and Recreation
DEQ	Virginia Department of Environmental Quality
DVD	digital versatile disc
ECR	environmental compliance report
EPA	[United States] Environmental Protection Agency
ESC	erosion and sediment control
GIS	geographic information system
GPS	global positioning system
HUC	hydrologic unit codes
IDDE	illicit discharge detection and elimination
MS4	municipal separate storm sewer system
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
QA/QC	quality assurance/quality control
SOP	standard operating procedures
SWM	stormwater management
SWPPP	stormwater pollution prevention plan
TMDL	total maximum daily load
USACE	United States Army Corp of Engineers
VDOT	Virginia Department of Transportation
VDOT SWMP	Virginia Stormwater Management Program Plan
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program
WLA	waste load allocations

EXECUTIVE SUMMARY

From October 22 through 26, 2012, a compliance inspection team comprising staff from the U.S. Environmental Protection Agency (EPA) Region 3, Virginia Department of Conservation and Recreation (DCR), and EPA's contractor, PG Environmental, LLC (PG) inspected the municipal separate storm sewer system (MS4) program of the Virginia Department of Transportation (hereinafter, VDOT or Permittee).

The purpose of this inspection was to obtain information that will assist EPA in assessing the Permittee's compliance with the requirements of the Permit, as well as the implementation status of the Permittee's current MS4 program.

Based on the information obtained and reviewed, EPA's compliance inspection team made several observations concerning the Permittee's MS4 program related to the specific Permit requirements evaluated. Table 1 below summarizes the permit requirements and the observations made by the inspection team.

Table 1. Summary of Permit Requirements and Inspection Observations

Permit Requirement	Observations	
Permit Section II.B.3.b - Storm Sewer System Map	Observation 1.	VDOT is mapping outfalls which they considered to be "regulated outfalls" located within urbanized areas.
	Observation 2.	VDOT did not have a complete storm sewer system map which displayed the locations of its "regulated MS4 outfalls" in urbanized areas.
	Observation 3.	VDOT has developed a model and procedure to assist in the outfall inventory process.
	Observation 4.	VDOT had identified 12,660 target evaluation areas for its outfall inventory, and as of June 2012 had identified 7,111 regulated outfalls.
	Observation 5.	VDOT uses a contractor to conduct quality assurance/quality control (QA/QC) of data provided by USACE for the outfall inventory evaluations, though the QA/QC task had not yet started at the time of the on-site inspection.
Permit Section II.B.3.d - IDDE Procedures	Observation 6.	A consultant to VDOT, EEE Consulting, Inc., created an "IDDE Manual" for VDOT in November 2011. They explained that the manual will be revised at some point to more clearly define the severity of potential illicit discharges.
	Observation 7.	In response to the EPA Records Request, VDOT provided several documents related to illicit discharge detection and elimination procedures which were not discussed during the on-site inspection and did not have dates of creation. It was unclear to the EPA Inspection Team when these additional documents were created and if they had been implemented by VDOT.

Table 1. Summary of Permit Requirements and Inspection Observations

Permit Requirement	Observations
Permit Section II.B.3.d - IDDE Procedures (continued)	Observation 8. As a component of USACE's activities to verify the locations of regulated outfalls, USACE staff performs a screening process to identify potential illicit discharges and connections for each outfall. Observation 9. The EPA Inspection Team met with representatives from USACE Baltimore District to discuss and observe USACE's process for conducting outfall inventory and screening activities. Observation 10. Based on a review of VDOT's "IDDE Database," it appeares that multiple IDDE field activities, including outfall screening, were conducted within 24–48 hours of rainfall events. Observation 11. Seventy "Suspect" flows and twenty-eight "Obvious" flows had been identified during outfall mapping/outfall screening activities. Observation 12. VDOT has an "Illicit Discharge Team" comprised of two staff members that respond to potential illicit discharges.
Permit Section II.B.3.f - IDDE Tracking	Observation 13. VDOT had a Microsoft® Access-based "IDDE Database" which is maintained by VDOT's Central Office and is used to document follow-up and corrective actions related to illicit discharges. Observation 14. Based on a review of VDOT's "IDDE Database," it is unclear whether all potential illicit discharges had been evaluated, and whether corrective action and resolution were documented. Observation 15. VDOT does not have an established protocol for sending reports of verified illicit discharges to an appropriate authority.
Construction Site Visits Conducted as a Component of the Inspection	On Monday, October 22, 2012 through Thursday, October 25, 2012 the EPA Inspection Team conducted site visits at 11 VDOT construction sites throughout four VDOT Districts— District No. 4 (Richmond), District No. 5 (Hampton Roads), District No. 6 (Fredericksburg), and District No. 9 (Northern Virginia). Multiple deficiencies were observed during the site visits. A summary of site observations are included in the body of the report. Detailed observations and photographs from the site visits are presented in individual site visit reports included as Appendix 7.
Permit Section II.B.4.a(5) - Construction Site Inspection and Enforcement	Observation 16. VDOT staff explained: • Approximately 75 percent of construction inspections are conducted by VDOT contractors, 25 percent by VDOT staff. • Stormwater inspections are documented using Form C-107."

Table 1. Summary of Permit Requirements and Inspection Observations

Permit Requirement	Observations
Permit Section II.B.4.a(5) - Construction Site Inspection and Enforcement (continued)	• VDOT requires a one-day stormwater inspector training. • VDOT has the ability to issue stop-work orders, withhold payment, take corrective action and back charge. Observations 17. The construction site visit reports are located in Attachments A through K. Observation 18. Through review of inspection records provided by VDOT, the EPA Inspection Team assessed the frequency at which stormwater inspections were conducted at the construction sites visited during the on-site MS4 inspection.
Permit Section II.B.4.c (Tracking of Land Disturbing Activities)	Observation 19. VDOT has a database titled "VSMP Tracking Database" to track regulated construction activities. Observation 20. The EPA Inspection Team reviewed the "VSMP Tacking Database" and noted the majority of project entries listed in the database lack full information.
Permit Section II.B.5.b(5) (Site Inspection for Structural Stormwater Management Facilities)	Observation 21. The "semiannual" inspection frequency from the VDOT Drainage Manual was based on the requirements in VDOT's previous MS4 permit. VDOT now inspects permanent stormwater management facilities on an annual basis. Observation 22. At the time of the on-site inspection, VDOT owned and maintained 618 post-construction BMPs within the MS4 urbanized areas. Observation 23. The EPA Inspection Team interviewed VDOT staff that conduct post-construction BMP inspections in the VDOT Hampton Roads District. Specific observations from this meeting are included in the body of the report. Observations 24–25. The "VDOT SWM Database" is used to record inspection and maintenance records for post-construction BMPs. The database identifies information pertinent to post-construction BMP inspections, including: (1) a BMP SWM identification number, (2) BMP inspection date, (3) inspector name, (4) BMP ratings, and (5) additional maintenance items to be addressed.

Table 1. Summary of Permit Requirements and Inspection Observations

Permit Requirement	Observations
Permit Section II.B.5.b(5) - Site Inspection for Structural Stormwater Management Facilities (continued)	Observation 26. The EPA Inspection Team conducted a review of the "VDOT SWM Database." Information presented to the EPA Inspection Team did not indicate whether post-construction BMP inspections had been conducted and documented during the entire three-year period prior to the inspection conducted by the EPA Inspection Team. Observation 27. The earliest post-construction BMP inspection date listed in the "Richmond District Inspections" records at the time of the inspection was March 14, 2011.
Permit Section II.B.5.b(6) (Tracking of Permanent Stormwater Management Facilities)	Observation 28. The "VDOT SWM Database" managed by the VDOT Maintenance Division includes various information about VDOT post-construction BMPs. Based on review, the database did not include information acres treated by each post-construction BMP and whether the BMP discharged to an impaired waterbody.
Maintenance Facility Inspections Conducted as a Component of the Inspection	On Monday, October 22, 2012 through Thursday, October 25, 2012 the EPA Inspection Team conducted facility inspections of nine VDOT maintenance facilities throughout four VDOT Districts— District No. 4 (Richmond), District No. 5 (Hampton Roads), District No. 6 (Fredericksburg), and District No. 9 (Northern Virginia). Detailed observations and photographs from the site visits are presented in individual inspection reports included as Attachments L through T.
Permit Section II.B.6 - Pollution Prevention/Good Housekeeping for Municipal Operations	Observation 29. The EPA Inspection Team's request for maintenance facility inspection records for the three years preceding the MS4 inspection, however VDOT only provided copies of reports for the facility assessments conducted by a VDOT consultant in May and June 2012. Observations 30–31. The EPA Inspection Team noted additional details regarding stormwater pollution prevention inspection activities during facility inspections of the Fredericksburg District Headquarters and the Reston Area Headquarters. These observations are included in the body of the report. Observation 32. VDOT maintenance facilities are not covered under the VPDES Industrial Stormwater Permit (VAR05). VDOT explained that an agreement had been formalized with Virginia DEQ stating that VDOT maintenance facilities do not require coverage under the Industrial General Permit. Documentation confirming this agreement was provided by VDOT.

Table 1. Summary of Permit Requirements and Inspection Observations

Permit Requirement	Observations
Permit Section II.B.6 - Pollution Prevention/Good Housekeeping for Municipal Operations (continued)	Observation 33. At the time of the EPA inspection, facility-specific plans for stormwater pollution prevention had not been developed or implemented for VDOT maintenance facilities. Observation 34. The EPA Inspection Team requested stormwater pollution prevention training information from VDOT maintenance facilities representatives during multiple on-site facility inspections. The VDOT District Maintenance Engineer (Ms. Marcie Parker) at the Fredericksburg District Offices explained that several weeks prior to the EPA inspection, MS4 training and an associated PowerPoint presentation was provided to facility staff; however, written documentation of that training was not maintained.

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ATTACHMENT G - LAKE ANNA PARKWAY
ATTACHMENT H - PACIFIC BOULEVARD
ATTACHMENT I - GILMERTON BRIDGE
ATTACHMENT J - PRINCESS ANNE ROAD
ATTACHMENT K - MIDLOTHIAN TURNPIKE

MAINTENANCE YARDS

ATTACHMENT L - CHESTER AREA HEADQUARTERS
ATTACHMENT M - RICHMOND DISTRICT COMPLEX
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INTRODUCTION

From October 22 through 26, 2012, a compliance inspection team comprising staff from the U.S. Environmental Protection Agency (EPA) Region 3, Virginia Department of Conservation and Recreation (DCR), and EPA's contractor, PG Environmental, LLC (PG), inspected the municipal separate storm sewer system (MS4) program of the Virginia Department of Transportation (hereinafter, VDOT or Permittee). Discharges from the Permittee's MS4 are regulated by the Virginia Department of Conservation and Recreation *General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems,* General Permit No. VAR04 (hereinafter, the Permit) as Permit Registration No. VAR040115, effective July 9, 2008. The Permit expires July 8, 2013. A copy of the Permit is included as Appendix 1. A copy of the Permittee's Stormwater Management Program Plan (hereinafter, VDOT SWMP) is included as Appendix 2.

The purpose of this inspection was to obtain information that will assist EPA in assessing the Permittee's compliance with the requirements of the Permit, as well as the implementation status of the Permittee's current MS4 program. The inspection schedule is presented in Appendix 3.

The EPA Inspection Team (composed of staff from EPA, DCR, and PG) obtained its information through a series of interviews with representatives from VDOT, along with a series of site visits, record reviews, and field verification activities. The primary representatives involved in the inspection were the following:

VDOT Representatives:	Mr. Roy Mills, Stormwater Program Administrator Mr. Morris Walton, Maintenance Program Manager Mr. Dennis Motley, District Construction Engineer Mr. Mohammad Mirshahi, Deputy Chief Engineer Mr. John Olenik, Jr., Engineer I, Location and Design Division Ms. Ellen Porter, Attorney General Assistant Ms. Amanda Doyle, Policy and Planning Specialist Ms. Christine Wattington, Senior Policy Analyst Ms. Tracey Harmon, Water Quality Permits Supervisor
VDOT Consultant Representatives:	Mr. Ian Frost, EEE Consulting, Inc. Ms. Sharon Harless, EEE Consulting, Inc. Mr. Lee Hixon, EEE Consulting, Inc. Mr. Chris Swanson, EEE Consulting, Inc.
EPA Representatives:	Mr. Chuck Schadel, EPA Region 3 Ms. Kyle Zieba , EPA Region 3 Ms. Allison Graham, EPA Region 3 Mr. Pete Gold, EPA Region 3 Ms. Elizabeth Ottinger, EPA Region 3 Ms. Kaitlin McCann, EPA Region 3

VADCR Representatives:	Mr. Doug Fritz, Stormwater Permits Manager Mr. Jeff Selengut, MS4 Permit Writer Mr. Mason Harper, MS4 Permit Writer
EPA Contractors:	Mr. Max Kuker, PG Environmental, LLC Mr. Bobby Jacobsen, PG Environmental, LLC Mr. Anthony D'Angelo, PG Environmental, LLC

For a more complete list of inspection participants, please refer to the sign-in sheets in Appendix 4.

DESCRIPTION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION MS4 PROGRAM

The State of Virginia regulations 4VAC50-60-1230. Permit application (Registration Statement) requires that an operator of a regulated small MS4s that is applying for permit coverage submit a complete registration statement to the department at least 90 days before the expiration date of the existing permit In order to continue uninterrupted permit coverage. The Registration Statement must include background information related to storm water management (e.g., watersheds receiving discharges from the MS4, drainage areas, TMDL information) and a copy of the MS4 Program plan. The MS4 Program Plan must include a list of Best Management Practices (BMPS) that are proposed to be implemented, and how the BMPs will be implemented. Section II – MS4 Management Program of the Permit, requires that the operator of a regulated small MS4 must develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable (MEP).

VDOT has been developing and implementing its MS4 Program since 2003 when the Virginia Department of Environmental Quality (DEQ) issued VDOT its initial MS4 permit coverage under the MS4 general permit. The Permittee's coverage under the current Permit was issued by DCR (General Permit No. VAR04) and became effective on July 9, 2008 with an expiration date of July 8, 2013. At the time of the inspection, the Permittee was in MS4 Permit Year 5 (i.e., July 9, 2012 through July 8, 2013). Table 2 provides a list of the Permit years and corresponding time periods.

DESCRIPTION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION MS4 PROGRAM (CONTINUED)

Table 2. Permit Years and Corresponding Time Periods

Permit Year	Corresponding Time Period	Compliance Date
1	July 9, 2008 – July 8, 2009	July 8, 2009
2	July 9, 2009 – July 8, 2010	July 8, 2010
3	July 9, 2010 – July 8, 2011	July 8, 2011
4	July 9, 2011 – July 8, 2012	July 8, 2012
5	July 9, 2012 – July 8, 2013	July 8, 2013

The Permittee's MS4 program was operating under the VDOT SWMP submitted in its Permit registration statement. The VDOT SWMP includes *Part I – Registration Statement*, *Part I – MS4 Program Plan*, and *Part II – Implementation Plan.*

According to VDOT's Web site, VDOT divides the state into nine districts, each of which oversees maintenance and construction on the state-maintained highways, bridges, and tunnels in its dedicated region. VDOT's highway system comprises about 58,000 miles of state-maintained roadways. With respect to VDOT's coverage under the Permit and applicability of the Permit requirements, *VDOT SWMP, Part I – Registration Statement* states that VDOT maintains various drainage facilities within the 13 urbanized areas of Virginia on public right-of-ways for primary, secondary, and interstate roadways as well as public properties containing support infrastructure. VDOT does not maintain those public right-of-ways within certain incorporated cities, towns, and other specifically designated jurisdictions that operate and maintain their own MS4s. VDOT's Web site states that cities and towns maintain 10,561 miles of urban streets within the state, and the counties of Henrico and Arlington maintain their own secondary roads.

The VDOT Stormwater Program Administrator (Mr. Roy Mills) explained that VDOT established an MS4 Steering Committee which develops and provides guidance to the VDOT districts. The VDOT MS4 Steering Committee is primarily comprised of staff from the Maintenance Division, Construction/Scheduling Division, and Environmental Division. The district administrators constitute the head of operations in each of the nine VDOT districts and are the points of contact for distributing information from the MS4 Steering Committee to the district staff.

The VDOT Water Quality Permits Supervisor (Ms. Tracey Harmon) explained that at the time of the inspection, VDOT was subject to eight total maximum daily loads (TMDLs) with assigned waste load allocations (WLAs) in urbanized areas throughout the state. She stated that VDOT had completed watershed studies for five of the eight TMDL WLAs.

DESCRIPTION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION MS4 PROGRAM (CONTINUED)

The VDOT Water Quality Permits Supervisor (Ms. Tracey Harmon) explained VDOT's general process for conducting the studies as the following: (1) complete MS4 outfall inventory and reconnaissance activities in a given TMDL area, (2) identify VDOT facilities in the TMDL area, (3) determine VDOT's right-of ways in the area and identify applicable land use categories, (4) calculate stormwater runoff from VDOT facilities and right-of-ways in the TMDL area using local rainfall data, and (5) determine loading of pollutants of concern coming from VDOT facilities and right-of-ways.

The VDOT Water Quality Permits Supervisor (Ms. Tracey Harmon) explained that VDOT has used various models for estimating the pollutant loading, including the DEQ model and the "Watershed Treatment Model" from the Center for Watershed Protection.

INFORMATION OBTAINED RELATIVE TO PERMIT REQUIREMENTS

The EPA Inspection Team held a conference call with VDOT staff on Friday, October 19, 2012 to discuss the inspection process and various aspects of VDOT's MS4 program management and implementation. On Monday, October 22, 2012 the EPA Inspection Team held an opening meeting with VDOT staff in VDOT's Central Office in Richmond, Virginia. From Monday, October 22, 2012 through Thursday, October 25, 2012 the EPA Inspection Team conducted site visits (provided as Attachments to this report) at 12 VDOT construction sites and 9 VDOT maintenance facilities throughout four VDOT Districts—District No. 4 (Richmond), District No. 5 (Hampton Roads), District No. 6 (Fredericksburg), and District No. 9 (Northern Virginia). The EPA Inspection Team met with VDOT's Central Office staff in Richmond, VA on Friday October 26, 2012 for a demonstration of VDOT's mapping capabilities and a closing meeting. Dry weather conditions were experienced throughout the on-site inspection activities.

During the inspection, the EPA Inspection Team obtained documentation and other supporting materials regarding compliance with the Permit (Appendix 6: VDOT Response Inventory & Document List). Information may have been obtained prior to and/or after meeting with VDOT staff during the physical inspection. Information to support observations is presented in this report. The presentation of inspection observations in this report does not constitute a formal compliance determination or notice of violation.

On October 10, 2012 the EPA Inspection Team provided the Permittee with a written list of records and documentation requested to be available for review during the on-site inspection, with certain items to be provided after the inspection. During the on-site inspection, the EPA Inspection Team made additional requests for documentation and records. VDOT staff requested that the EPA Inspection Team compile a comprehensive records request throughout the week rather than requesting documents at the time the EPA Inspection Team initially identified the need for them (i.e., during discussions and site visits).

INFORMATION OBTAINED RELATIVE TO PERMIT REQUIREMENTS (CONTINUED)

During the closing meeting on Friday, October 26, 2012, the EPA Inspection Team provided VDOT with an updated document request list that contained both the original items requested before the physical inspection and additional items (hereinafter, EPA Records Request; Appendix 5). Subsequent to the physical inspection, VDOT transmitted the requested records electronically to the EPA Inspection Team, along with a written inventory of the documents (hereinafter, VDOT Response Inventory, Appendix 6) based on the EPA Records Request. The VDOT Response Inventory is referenced as applicable throughout this report.

Multiple documents provided in the VDOT Response Inventory are referenced in this report as supporting information. The entire VDOT Response Inventory and associated documents were provided electronically on a digital versatile disc (DVD); the DVD accompanies the submission of this inspection report. Copies of the materials are maintained by EPA Region 3 and can be made available upon request. Individual construction site inspection reports, maintenance facility inspection reports conducted during the inspection are included as individual Appendices. Photographs relevant to each site/facility inspection are included with each corresponding inspection report. General photograph documentation is provided in Appendix 7-Photograph Log.

The report below describes and outlines Permit requirements with specific sections cited, the related requirements, and observations made during the inspection. The report maintains the numberic system used in the Permit and is sequential. Sections of the Permit are restated followed by the observations concerning those requirements.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

The Permit requires VDOT to develop, implement, and enforce a program to detect and eliminate illicit discharges into the MS4. The program must be implemented in accordance with Permit Section II.B.3.a–g.

Permit Section II.B.3.b (Storm Sewer System Map) – Section II.B.3.b of the Permit requires VDOT to develop (if not already developed) and maintain an updated storm sewer system map, showing the following:

- The location of all known outfalls of the regulated small MS4 including those physically connected to a regulated MS4.
- The associated surface waters and hydrologic unit codes (HUCs).
- The names and locations of all impaired surface waters that receive discharges from those outfalls.

Best management practice (BMP) 3C of the *VDOT SWMP, Part II – Implementation Plan* states that in Permit Year 3 (i.e., July 9, 2010 through July 8, 2011) VDOT will begin inventorying the outfalls based on the functional classification of the roadway and/or watershed as required for satisfying other MS4 BMPs. The document indicates the inventory will continue in Permit Years 4 and 5.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.b - Storm Sewer System Map (continued)
Page 3 of the *VDOT SWMP Part I – MS4 Program Plan* requires VDOT to maintain an updated tracking system for all known outfalls that discharge from primary and interstate highways.

Observation 1: VDOT was mapping outfalls which they considered to be "regulated outfalls" located within urbanized areas. During the conference call on October 19, 2012 and again during the opening meeting, the VDOT Stormwater Program Administrator (Mr. Roy Mills) explained that VDOT considers an outfall to be a "regulated outfall" (i.e., subject to the requirements of the Permit) if the outfall discharges directly to wetlands or waters of the United States and is within an urbanized area. The VDOT Maintenance Program Manager (Mr. Morris Walton) stated that any outfall which discharges concentrated stormwater to a waterbody would be considered a regulated outfall. He added that if an outfall discharged to a conveyance ditch several hundred yards from a wetland or a stream, the outfall would not be considered a regulated outfall, and therefore would not be mapped. The VDOT Maintenance Program Manager (Mr. Morris Walton) stated that interconnections to other MS4s are not mapped, as there could be instances where there are numerous interconnections in a small area.

Observation 2: VDOT does not have a complete storm sewer system map which displays the locations of its regulated MS4 outfalls in urbanized areas. VDOT staff explained that they maintained a centralized geographic information system (GIS)-based map of the storm sewer system, but the map does not include all of the MS4 outfalls and does not include storm sewer pipe segments or VDOT's right-of-ways. The VDOT Maintenance Program Manager (Mr. Morris Walton) stated that VDOT started its mapping efforts on July 22, 2009. At the time of the inspection, VDOT had mapped about 50 percent of its "regulated outfalls." He stated that VDOT would likely have completed about 75 to 80 percent of the mapping by the end of the Permit term.

Observation 3: VDOT has developed a model and procedure to assist in the outfall inventory process. The VDOT Maintenance Program Manager (Mr. Morris Walton) explained that the model compares the location of VDOT's roadway right-of-ways with waterbodies (e.g., streams and wetland areas) to identify areas where there may be regulated outfalls. VDOT calls these areas, where the centerline of a VDOT right-of-way intersects a waterbody including a 25-meter buffer added to the waterbody, "target evaluation areas." Outfalls outside VDOT right-of-ways are not included in the target evaluation areas, and therefore are not mapped.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.b - Storm Sewer System Map

Observation 3: (continued)

The VDOT Maintenance Program Manager (Mr. Morris Walton) explained that in some areas where interstates were on the edges of urbanized areas, VDOT expanded its evaluation area to include the entire roadway segment. The VDOT Maintenance Program Manager (Mr. Morris Walton) stated that VDOT had run the model four times and will run it once more after the 2010 U.S. Census urbanized area data is released. In response to the EPA Records Request Item No. 3 (Appendix - 5), VDOT provided several documents which supplied additional details and visual images regarding the outfall inventory modeling process, including a presentation displaying applicable GIS layers (see Appendix 6 - VDOT Response Inventory, Item No. 3).

Observation 4: VDOT had identified 12,660 target evaluation areas for its outfall inventory, and as of June 2012 had identified 7,111 regulated outfalls. The VDOT Maintenance Program Manager (Mr. Morris Walton) explained that VDOT staff analyzed the target evaluation areas generated by the model to identify locations with multiple targets in one area (i.e., "clusters"). The 12,660 target evaluation areas were reduced to 7,525 clusters for evaluation.

The outfall inventory model and the identified clusters were then transmitted to the United States Army Corps of Engineers (USACE; Baltimore, Norfolk, and Wilmington Districts) to conduct the evaluations in urbanized areas. VDOT staff explained that USACE has conducted these activities on behalf of other entities, and they provide a 50 percent funding match to VDOT for this work.

VDOT staff stated that they depend on matching funds from USACE to finance the activities; therefore, if for some reason USACE is not able to continue funding the program, VDOT will have to secure funding from other sources to be able to continue the activities.

The USACE staff surveyed and evaluated the stormwater outfalls in the watersheds subject to TMDL requirements first. As of June 2012, USACE had evaluated 3,504 clusters and identified 7,111 as "regulated outfalls" according to VDOT criteria. The VDOT Maintenance Program Manager (Mr. Morris Walton) stated that by July 2013 mapping of all of the urbanized area will be completed with the exception of the Richmond and Hampton Roads areas, which are not subject to TMDL requirements.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.b, Storm Sewer System Map (continued)

Observation 5: VDOT hired a contractor, Lewis Berger Group, to conduct quality assurance/quality control (QA/QC) of data provided by USACE for the outfall inventory evaluations. The VDOT Maintenance Program Manager (Mr. Morris Walton) stated that at the time of the inspection VDOT had held two meetings with the contractor, procedures were being developed, and the contractor would be initiating its QA/QC activities "shortly." Based on discussions with VDOT staff during the on-site inspection, it was unclear to the EPA Inspection Team what the extent and focus of the QA/QC activities would consist of, and when such activities would begin.

Permit Section II.B.3.d, IDDE Procedures – Section II.B.3.d of the Permit requires VDOT to develop and implement procedures to detect and address nonstormwater discharges, including illegal dumping, to the regulated small MS4.

BMP 3B of the *VDOT SWMP Part II – Implementation Plan* states in Permit Year 1 (i.e., July 9, 2008 through July 8, 2009) development of illicit discharge identification and reporting protocols will be completed as part of the requirement matrix for NPDES/MS4 Program software and instructions manual for outfall inventory data collection. BMP 3C includes milestones related to development of the NPDES/MS4 Program software instructional manual for outfall inventory data collection. With regard to the instructional manual, BMP 3C indicates that in Permit Year 1 (i.e., July 9, 2008 through July 8, 2009) VDOT will review all published material and other DOT manuals and determine the best protocol to be utilized to inventory the outfalls. Further, in Permit Year 2 (July 9, 2009 through July 8, 2010) VDOT will complete development of the manual by merging the protocol with the data collection procedures included in the software.

Observation 6: VDOT's *MS4 Year Three Progress Report July 1, 2010 to June 30, 2011* (hereinafter, Appendix 9.c. -Year 3 Annual Report) indicates VDOT has worked with its consultant to develop a written protocol for the IDDE Program to satisfy BMP 3B. VDOT staff stated that the consultant, EEE Consulting, Inc., created an "IDDE Manual" (Appendix 6 – VDOT Response Inventory, Item #5) for VDOT in November, 2011. VDOT explained that the IDDE Manual will be revised in the future to more clearly define the severity of potential illicit discharges. At the time of the on-site inspection, the revision had not been completed.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.d, IDDE Procedures (continued)

Observation 7: The EPA Inspection Team requested VDOT's procedures to detect and address nonstormwater discharges, including illegal dumping (i.e., written protocol for IDDE program; EPA Records Request Item No. 5). After the inspection and in response to EPA's request, VDOT provided the following documents (Appendix 6 - VDOT Response Inventory, Item No. 5):

(1) *Final VDOT Illicit Discharge Detection and Elimination Manual*, dated November 2011;

(2) *Elimination of Polluted Stormwater in VDOT Stormwater Systems Illicit Discharge Detection & Elimination (IDDE) Field Guide*, with no date of creation;

(3) "*Polluted Stormwater Pamphlet*," with no date of creation; and

(4) "*VDOT Maintenance IDDE Reclassification Process*", with no date of creation.

However, VDOT's explanation of the IDDE Program during the inspection only included the "*Final VDOT Illicit Discharge Detection and Elimination Manual*". There was no evidence that the other documents are being utilized. VDOT only discussed one of the documents during the onsite activity. After the inspection VDOT provided its documents in response to the inspection team's request. Included in the response were additional documents that were not mentioned during the onsite activity and did not have dates of creation listed on them.

Observation 8: VDOT staff explained that as a component of USACE's activities to verify the locations of regulated outfalls, USACE staff performs a screening process to identify potential illicit discharges and connections for each outfall. VDOT staff explained that the locations of outfall flows which warrant concern are logged into VDOT's Microsoft® Access-based "IDDE Database" (example provided in Appendix 6 – VDOT response Inventory, Item 3.A & 6.A) which is maintained by VDOT's Central Office.

The outfall screening is documented on a form titled "Outfall Reconnaissance Inventory Field Sheet" (developed in September 2012). The "Field Sheet" is a modified version of the outfall inventory form included in the EPA guidance document titled *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.d -IDDE Procedures

Observation 9: On October 25, 2012, the EPA Inspection Team met with representatives from USACE Baltimore District on Westfax Drive in Chantilly, VA at Cain Branch Stream Valley Park to discuss and observe USACE's procedures for conducting outfall inventory and screening activities. USACE Baltimore District representatives explained outfall mapping procedures and identified both a regulated and non-regulated outfall during the demonstration (Appendix 7, Photograph Log - Photographs 1 through 8).

USACE receives outfall target clusters for evaluation from the VDOT Maintenance Program Manager. USACE staff stated that outfall screening activities are ideally conducted during dry weather, preferably more than 48 hours after a rainfall event, but they may occur during wet weather as outfall mapping is the primary schedule driver, with outfall screening considered an ancillary activity. USACE staff also stated that they use two-person teams to conduct the outfall inventory and screening activities and they record observations electronically, while in the field, on computer tablets. USACE staff stated that they use Chapter 11 of the EPA guidance document titled *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* for guidance in conducting these activities.

USACE staff explained that, while in the field, they first determine whether an identified outfall or cluster location is located within VDOT right-of-way. USACE staff explained that guidelines for determining VDOT right-of-way are not contained within a standard operating procedure (SOP) but are verbally communicated to USACE staff prior to outfall screening activities. USACE staff stated the general rule of thumb is that a right-of-way ends approximately 25 to 50 feet from the roadway; outfalls that do not appear to be within this distance are not mapped for future reference. USACE staff record global positioning system (GPS) coordinates of each regulated outfall on the computer tablet. These coordinates are updated into the mapping system on the computer tablet. A map of an outfall, the GPS coordinates, and any outfall observations are then sent to the VDOT Maintenance Program Manager for integration with VDOT's centralized GIS-based map and "IDDE Inventory" (Appendix 6 – VDOT response Inventory, Item 3.A).

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.d -IDDE Procedures

Observation 9: (continued)

If flow from a VDOT MS4 outfall is identified during dry weather conditions, USACE staff record observations (e.g., color, odor, and turbidity) directly into a database on the computer tablet. USACE staff indicated that they typically notify the VDOT Maintenance Program Manager within one day if an obvious illicit discharge is identified. According to USACE staff, USACE staff do not trace observed flows but alerts VDOT of the flows.

USACE staff stated that outfall clusters are usually mapped, outfall locations confirmed and screened within 15 to 20 minutes. An average watershed is mapped and cleared within two to three months. At the time of the on-site inspection, USACE staff stated that 48 percent of identified clusters have been mapped and cleared (7,111 outfalls physically visited). USACE staff stated the most common problem faced by its field staff is properly identifying the VDOT right-of-way. A comprehensive map which delineates VDOT's right-of-way throughout the state was not provided at the time of the Inspection.

Observation 10: Subsequent to the Inspection, VDOT provided the EPA Inspection Team with an electronic copy of its "IDDE Database" that includes records of outfall inventory activities conducted during the period from November 2009 through April 2012 (Appendix 6, VDOT Response Inventory Item No. 6.A). A table within the database titled "tbl_Team_All" includes information such as staffing teams, field dates, and associated weather conditions (e.g., rainfall with 24 hours and 48 hours). There were 227 total entries in the "tbl_Team_All" table, and 32 entries (14 percent) indicated there was 0.20 inch or more of rainfall within 24 hours of the field date listed. In addition, it appears that the "IDDE Database" only includes "Potential," "Obvious," and "Suspect" illicit discharges. Outfalls that were identified as being "Unlikely" to have had an illicit discharge are not included in the database; therefore, there may be more examples when rainfall was noted within 24-48 hours of the field activity.

Observation 11: The VDOT Maintenance Program Manager (Mr. Morris Walton) stated 70 "Suspect" flows and 28 "Obvious" flows had been identified during outfall mapping/outfall screening activities. VDOT's "IDDE Database" contained 459 entries in the table titled "Outfalls Virginia IDDE September2012." Twenty-eight of the entries listed the "IDDE_Characterization" field as "Obvious," while 70 entries were listed as "Suspect." In addition, 361 entries were listed as "Potential." Database is consistent with Mr. Walton's statement.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.d -IDDE Procedures

Observation 11: (continued)

At the time of inspection, definitions for the different categories on entries into the IDDE Database were not provided.

Subsequent to the Inspection, VDOT provided a document titled "IDDE Reclassification Process" (Appendix 6, Item No. 5.D) which describes categorization requirements for the following four categories: "Unlikely," "Potential," "Suspect," and "Obvious." The document did not have a date of creation and it was unclear to the EPA Inspection Team when this procedure was established and whether it was implemented.

Observation 12: The VDOT Maintenance Program Manager (Mr. Morris Walton) explained that VDOT has an Illicit Discharge Team which is composed of himself and one other VDOT staff member. He stated that the Illicit Discharge Team, along with a staff member from the respective VDOT District, has responded to multiple potential illicit discharge locations based on suspect flows identified by USACE. During on-site discussions, VDOT staff stated that they respond to a report of a potential illicit discharge from an "external complaint" within one week, but did not specify the timing between potential illicit discharge identification by USACE staff, notification of VDOT staff, and the response by VDOT's Illicit Discharge Team.

Based on discussion with VDOT staff, VDOT's "Illicit Discharge Team" will track flows upstream to try and identify the source. Photographs taken during outfall screening were not provided during the Inspection. Subsequent to the Inspection, VDOT provided a document titled "Elimination of Polluted Stormwater in VDOT Stormwater Systems" (IDDE Field Guide) – page 10 of the document states that photographs should be taken during the investigation. The IDDE Field Guide does not have a date of creation. The IDDE Field Guide identifies that once an illicit discharge is verified and the information is referred to the appropriate VDOT Hazardous Material manager, local or state official for action, the work order can be closed. In the *Final VDOT Illicit Discharge Detection and Elimination Manual*, dated November 2011, Appendix A "VDOT IDDE Flow Chart" outlines the general process for illicit discharge detection and elimination from the initial identification through resolution (Appendix 6, Item No. 7.B).

Permit Section II.B.3.f - IDDE Tracking – Section II.B.3.f of the Permit requires VDOT to track the number of illicit discharges identified and to provide narrative on how they were controlled or eliminated.

BMP 3D of *VDOT SWMP, Part II – Implementation Plan* states that in Permit Year 1 VDOT will develop a protocol for sending reports of verified illicit discharges to the appropriate authorities.

Page 3 of the *VDOT SWMP, Part I – MS4 Program Plan* identifies that VDOT will develop a procedure for and maintain a contact list for reporting illicit discharges found entering the MS4.

Observation 13: As stated above, VDOT had a Microsoft® Access-based "IDDE Database" which is maintained by VDOT's Central Office. VDOT staff explained that follow-up and corrective actions related to illicit discharges are documented in this database. During the EPA field inspection, VDOT provided a brief demonstration of the database. Subsequent to the EPA field inspection, VDOT provided the EPA Inspection Team with an electronic copy of its "IDDE Database" that includes records of outfall inventory activities conducted during the period from November 2009 through April 2012 (Appendix 6, Item No. 6.A).

Observation 14: As described in Observation 11, VDOT staff explained there were 70 "Suspect" flows and 28 "Obvious" flows identified during outfall mapping/outfall screening activities. The VDOT "IDDE Database" includes various tables and forms. Subsequent to the EPA field inspection, the EPA Inspection Team reviewed a portion of the VDOT "IDDE Database," but it was unclear whether all potential illicit discharges had been evaluated by VDOT, whether corrective action and resolution were documented when appropriate, and whether this information was included in the database. Specifically, the EPA Inspection Team reviewed the database titled: "Outfalls_Virginia_IDDE_September2012 ". The review included tables "tbl_Inventory," "tbl_inspection," and "tbl_IDDE,". The review identified the following:

a. In the table titled "Outfalls_Virginia_IDDE_September2012," 28 of the entries listed in the "IDDE_Characterization" field were identified as "Obvious", 70 entries were listed as "Suspect", and 361 entries were listed as "Potential."
b. The "tbl_IDDE" table only includes four record entries (VDOT Outfalls e400852, USACE0693, USACE0692, and USACE0076).
c. The following entry is for the potential illicit discharge at VDOT Outfall e400852:
    i. Outfall inventory date not noted.
    ii. Outfall inspected and IDDE recorded on 10/17/2011.
    iii. IDDE tracking for outfall closed on 10/21/2012.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.f - IDDE Tracking

Observation 14: (continued)

d. The following entry is for the potential illicit discharge at VDOT Outfall USACE0693:
   i. Outfall inventoried on 11/18/2009 and noted as "Obvious" flow.
   ii. Outfall inspected and potential illicit discharge recorded on 1/23/2012.
   iii. IDDE tracking for outfall closed on 3/20/2012.

e. The following entry is for the potential illicit discharge at VDOT Outfall USACE0692:
   i. Outfall inventoried on 11/18/2009 and noted as "Suspect" flow.
   ii. Outfall inspected and potential illicit discharge recorded on 11/18/2009.
   iii. IDDE tracking for outfall closed on 3/20/2012.

f. The following entry is for the potential illicit discharge at VDOT Outfall USACE0076:
   i. Outfall inventoried on 11/17/2009 and noted as "Obvious" flow.
   ii. Outfall inspected and potential illicit discharge recorded on 1/12/2012.
   iii. IDDE tracking for outfall closed on 1/12/2012.

Observation 15: The EPA Inspection Team requested VDOT's procedures for notifying an appropriate authority (e.g., other MS4 localities with enforcement capabilities of verified illicit discharges) (Appendix 5, EPA Records Request, Item No. 7). In response, VDOT provided the following:

(1) a template letter which notifies a municipality of potential system interconnections between that municipality and VDOT;

(2) a flow chart which displays the general process of the initial identification of illicit discharges through resolution, including notification of the appropriate locality; and

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

Permit Section II.B.3.f - IDDE Tracking

Observation 15: (continued)

(3) an "IDDE Flowchart" with information not clearly identifiable (Appendix 6, Item No. 7).

VDOT did not provide examples of an actual notification to an MS4 of an illicit discharge that was verified/identified by VDOT.

MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM

The Permit requires VDOT to:

> Develop, implement, and enforce procedures to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or equal to or greater than 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act. Additionally, reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

The Permittee's program must be implemented in accordance with Permit Section II.B.4.a–c.

VDOT is required to obtain an NPDES permit under the CWA for storm water discharges associated with construction activity. The NPDES Program has been delegated to the State of Virginia and therefore VDOT has obtained NPDES permit coverage through the Virginia Construction Stormwater General Permit (NPDES Permit). The NPDES Permit, Section II, D. establishes requirements for a Storm Water Pollution Prevention Plan (SWPPP), that include erosion and sediment management controls. The NPDES Permit, Section II, D. allows for an Erosions And Sediment Control Plan that is approved by a local municipality to be used to fulfill the erosion and sediment management control requirements of the SWPPP.

DCR Approval of the 2010 VDOT Annual Standards & Specifications for Erosion & Sediment Control (ESC) and Stormwater Management (SWM) allows VDOT to implement its own storm water management program for construction activity. All regulated land disturbing activities undertaken by VDOT must conducted in accordance with the approved 2010 VDOT Annual Standards and Specifications.

The VDOT's MS4 Program Plan, page 4, under the heading "Permit Condition /**Construction site stormwater runoff control" states:** The operator shall develop, implement, and enforce procedures to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or equal to or greater than 2,500 square feet in Chesapeake Bay Preservation Area.

The VDOT's MS4 Program Plan, page 4, under the heading "ACTION TO COMPLY WITH GENERAL PERMIT" states : VDOT will comply with the Virginia Erosion and Sediment Control Law, the Virginia Stormwater Management Act and attendant regulations regarding land disturbance activities. Submit annual draft standards and specifications to DCR for review and approval.

NPDES GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES - VAR10 (Construction Permit)

Construction sites in Virginia are permitted under the "General Permit For Discharges Of Stormwater From Construction Activities Authorization To Discharge Under The Virginia Stormwater Management Program And The Virginia Stormwater Management Act -VAR10 " (Construction Permit) effective on July 1, 2009. The authorized discharge shall be in accordance with this cover page, Section I—Discharge Authorization and Special Conditions, Section II—Stormwater Pollution Prevention Plan, and Section III—Conditions Applicable To All VSMP Permits. The Construction Permit requires:

SECTION II STORMWATER POLLUTION PREVENTION PLAN

Section II - Stormwater Pollution Prevention Plan, A. Stormwater Pollution Prevention Plan Framework.

1. A stormwater pollution prevention plan (SWPPP) shall be developed prior to submission of a registration statement and implemented for the construction activity covered by this permit. SWPPPs shall be prepared in accordance with good engineering practices.
2. The SWPPP shall:
   a. Identify potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the construction site;
   b. Describe control measures that will be used to minimize pollutants in stormwater discharges from the construction site; and
   c. Comply with the terms and conditions of this permit.
3. The SWPPP requirements of this general permit may be fulfilled by incorporating by reference other state or local plans such as (i) an erosion and sediment control (ESC) plan, (ii) an agreement in lieu of a plan as defined in 4VAC50-30-10, or (iii) a stormwater management plan. Any Plans must be approved by the locality in which the construction activity is to occur or by another appropriate plan approving authority authorized prior to the commencement of land disturbance.
4. All plans incorporated by reference into the SWPPP become enforceable under this permit.

[1] 4VAC 50-30 et seq., Virginia's Erosion and Sediment Control Regulations
4VAC50-30-40. Minimum Standards ...

2. During construction of the project, soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrow areas and soil intentionally transported from the project site.
3. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform, mature enough to survive and will inhibit erosion.
4. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance takes place.

[1] 4VAC50-30-40. Renumbered as 9VAC25-840-40.

Historical Notes

Derived from VR625-02-00 § 4; eff September 13, 1990; amended, Virginia Register Volume 11, Issue 11, eff. March 22, 1995; Volume 29, Issue 4, eff. November 21, 2012; renumbered, Virginia Register Volume 30, Issue 2, eff. October 23, 2013.

5. Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after installation ....
11. Before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel ....
17. Where construction vehicle access routes intersect paved or public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual development lots as well as to larger land-disturbing activities.

Approval Letter for the VDOT Annual ESC & SWM Standards & Specifications (Standards & Specs). - June 3, 2011

VDOT has been approved to implement their own construction program as along as all regulated land disturbing activities undertaken by VDOT are conducted in accordance with the approved 2010 VDOT Annual Standards & Specifications. Individual project-specific erosion and sediment control and stormwater management plans must be prepared to ensure proper on site implementation of erosion and sediment control and stormwater management measures. However, VDOT plans need not be submitted to the VADEQ for approval as long as they comply with approved 2010 VDOT Annual ESC & SWM Standards & Specifications. As part of the 2010 Standards & Specs, VDOT has referenced Appendix - A (Virginia Erosion and Sediment Control Law, Regulations, and Certification Regulations FY 2009), which includes the following:

4VAC50-30-60. Maintenance and inspections (pg 31)

All erosion and sediment control structures and systems shall be maintained, inspected and repaired as needed to insure continued performance of their intended function. A statement describing the maintenance responsibilities of the permittee shall be included in the approved erosion and sediment control plan.

Construction Site Visits Conducted as a Component of the Inspection – On Monday, October 22, 2012 through Thursday, October 25, 2012 the EPA Inspection Team conducted site visits at 12 VDOT construction sites throughout four VDOT Districts— District No. 4 (Richmond), District No. 5 (Hampton Roads), District No. 6 (Fredericksburg), and District No. 9 (Northern Virginia). The purpose of the site visits was to assess the Permittee's oversight activities for construction sites and document site conditions. During the site visits, the EPA Inspection Team walked the construction sites with VDOT and contractor representatives. Table 3 identifies the construction sites that were visited during the inspection.

MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM (continued)

Table 3. Construction Site Visits

Project Name	VDOT District	VAR No.	Site Visit Date
Route 337 (Hampton Boulevard) Construction Project	District No. 5 (Hampton Roads)	VAR 10-10-5--3-05	10/25/2012
Nimmo Parkway Construction Project	District No. 5 (Hampton Roads)	VAR 10-11-5-3-02	10/24/2012
Route 147 (Huguenot Bridge) Construction Project	District No. 4 (Richmond)	(VAR 10-10-4-5-13)	10/22/2012
Route 50 (Lee Jackson Highway) Construction Project	District No. 9 (Northern Virginia)	VAR10-12-9-2-01	10/ 22/2012
Route 286 (Fairfax County Parkway) Construction Project	District No. 9 (Northern Virginia)	VAR 10-10-9-1-16	10/23/2012
Route 27/244 (Washington Ave) Construction Project	District No. 9 (Northern Virginia)	VAR 10-12-9-1-21	10/25/2012
Route 208 (Lake Anna Parkway) Bypass Construction Project	District No. 6 (Fredericksburg)	VAR 10-10-6-2-13	10/23/2012
Route 1036/Pacific Boulevard Extension Construction Project	District No. 9 (Northern Virginia)	VAR 10-12-9-2-02	10/24/2012
Gilmerton Bridge Construction Project	District No. 5 (Hampton Roads)	VAR 10-11-5-3-09	10/25/2012
Route 166 (Princess Anne Road) Construction Project	District No. 5 (Hampton Roads)	VAR 10-11-5-3-02	10/24/2012
Route 60 (Midlothian Turnpike) Construction Project	District No. 4 (Richmond)	VAR 10-10-4-3-07	10/23/2012

Detailed observations and photographs from the site visits are presented in individual site visit reports included as Attachments A through K. A brief summary of the observations from each site is discussed below.

Permit Section II.B.4.a(5) (Construction Site Inspection and Enforcement) – The Permit requires VDOT to develop, implement, and enforce procedures to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities. Furthermore, Section II.B.4.a(5) of the Permit specifies that development and implementation procedures for site inspection and enforcement of control measures must be included.

Page 5 of the *VDOT SWMP, Part I – MS4 Program Plan* (Appendix 2-VDOT SWMP) identifies that site inspections will be conducted in accordance with the most recent DCR-approved version of the VDOT Erosion and Sediment Control (ESC) and Stormwater Management (SWM) Standards and Specifications (Appendix 8.b.).

MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM
Permit Section II.B.4.a(5), Construction Site Inspection and Enforcement (continued)

Appendix F, Section 9.2 of the 2012 VDOT ESC and SWM Standards and Specifications document states that the inspection and maintenance of all temporary and permanent erosion and sediment controls shall be conducted in accordance with Sections 107.16 and 303.03 of the 2007 VDOT Road and Bridge Specifications. Section 107.16(a) of the 2007 VDOT Road and Bridge Specifications states:

> "For projects that disturb 10,000 square feet or greater of land or 2,500 square feet or greater in Tidewater, Virginia, the Contractor shall have within the limits of the project during land disturbance activities, an employee certified by the Department in Erosion and Sediment control who shall inspect erosion and siltation control devices and measures for proper installation and operation immediately after each rainfall, at least daily during periods of prolonged rainfall, and weekly when no rainfall event occurs and promptly report their findings to the Inspector."

Furthermore, Section 107.16(e)4.a states:

> "The Contractor shall be responsible for conducting inspections in accordance with the requirements herein. The Contractor shall document such inspections by completion of Form C-107 (a) and (b), Construction Runoff Control Inspection Form and Continuation Sheet, in strict accordance with the directions contained within the form."

In response to the EPA Records Request, VDOT provided the "Virginia Department of Transportation 2007 Road and Bridge Supplemental Specifications," dated July 6, 2012, which includes an amendment to Section 107.16(a), [Appendix 6 - Item No. 8.F]. The amendment states:

> For projects that disturb 10,000 square feet or greater of land or 2,500 square feet or greater in Tidewater, Virginia inspections shall include all areas of the site disturbed by construction activity and all off site support facilities covered by the project's Stormwater Pollution Prevention Plan. Inspections shall be conducted at least once every 14 calendar days and within 48 hours following any runoff producing storm event (Note: If an inspection is conducted as a result of a storm event, another inspection is not required for 14 calendar days following provided there are no more runoff producing storm events during that period). For those areas that have been temporarily stabilized or runoff is unlikely to occur due to winter conditions (e.g., the site is covered with snow or ice or frozen ground exists), inspections shall be conducted at least once a month.

MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM
Permit Section II.B.4.a(5), Construction Site Inspection and Enforcement (continued)

Based on the documents provided by VDOT, it is the understanding of the EPA Inspection Team that prior to the amendment to Section 107.16(a) of the VDOT Road and Bridge Specifications on July 6, 2012 stormwater inspections were to be conducted weekly and after rainfall events. After adoption of the amendment on July 6, 2012 inspections were to be conducted at least once every 14 calendar days and within 48 hours following any runoff producing storm event.

BMP 4D of the *VDOT SWMP, Part II – Implementation Plan* states that in Permit Years 1 through 5, VDOT will perform site inspections and compliance reviews and track data in VDOT's Comprehensive Environmental Data and Reporting System (CEDAR). CEDAR is a project development and tracking tool developed by VDOT that is used to organize environmental data about projects in one system.

Observation 16: During the conference call on Friday, October 19, 2012 VDOT staff explained the following with regard to construction site inspection and enforcement:

a. Approximately 75 percent of stormwater oversight inspections are conducted by VDOT contractors, with the remaining 25 percent conducted by VDOT staff.

b. Stormwater inspections are documented on the "Construction Runoff Control Inspection Form C-107" (hereinafter, C-107 Form; Appendix 6 - Item No. 8.A). Typically the C-107 Form is filled out by the prime contractor for the construction project; the form is reviewed by the VDOT oversight inspector. Follow-up requirements from the stormwater inspection are noted on the Form C-107.

c. VDOT requires all inspectors who conduct stormwater inspections on behalf of VDOT to complete a one-day (eight-hour) training course hosted by the Virginia Transportation Construction Alliance. The training is conducted in accordance with a VDOT Training Manual and culminates with a written exam.

d. In order to ensure adequate stormwater runoff controls are implemented and maintained, VDOT has the ability to issue a stop-work order, withhold payment, take corrective action and back charge the contractor, and redirect forces on a construction project.

Observation 17: The construction sites inspected by the EPA Inspection Team are listed below. Details of the inspections are listed in Attachments A through K.

Observation 18: In response to the EPA Records Request, VDOT provided the EPA Inspection Team with copies of construction site inspection records for the projects visited during the inspection (Appendix 6 - Item No. 37.F).

MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM
Permit Section II.B.4.a(5), Construction Site Inspection and Enforcement (continued)

Permit Section II.B.4.c (Tracking of Land Disturbing Activities) – Section II.B.4.c of the Permit requires VDOT to track regulated land-disturbing activities, including the total number of regulated land-disturbing activities and the total disturbed acreage.

Page 5 of the *VDOT SWMP, Part I – MS4 Program Plan* identifies that VDOT will develop a database for tracking regulated land-disturbing activities.

BMP 4A of the *VDOT SWMP, Part II – Implementation Plan* states that in Permit Years 1 through 5, VDOT will acquire and track Virginia Stormwater Management Program (VSMP) Construction Permit coverage for regulated land disturbing activities.

Observation 19: VDOT staff explained that VDOT had developed a Microsoft Access-based database titled "VSMP Tracking Database" to track implementation of post-construction stormwater management requirements at construction activities (Appendix 6 - Item No. 10.A). In response to the EPA Records Request, VDOT provided the database titled "VSMP Tracking Database" which VDOT identified as its "database used to track land-disturbance activities regulated under the VSMP Permit Program."

Observation 20: The EPA Inspection Team reviewed the "VSMP Tacking Database". The database provided by VDOT includes projects with entry dates from 2004 through 2012, but is considerably incomplete. The following was noted:

a. Two-hundred fifty-one projects were listed in the database table titled "Project Data."
b. The column titled "Total EST area of disturbance" in the "Project Data" table was not populated for all projects listed in the database.
c. Project description/location, contact information, and GPS points were not identified for all projects.
d. Based on our observations, it appears that the majority of project entries listed in the database are incomplete.

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

The Permit requires VDOT to do the following:

> Develop, implement, and enforce procedures to address stormwater runoff to the regulated small MS4 from new development and redevelopment projects that disturb greater than or equal to one acre or equal to or greater than 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Act, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the regulated small MS4. The procedures must ensure that controls to prevent or minimize negative impact to water quality and quantity are in place and are implemented in accordance with Permit Section II.B.4.a–b.

VDOT staff explained that BMPs installed by VDOT over the past 20 years have typically been dry detention basins, but now there is a greater emphasis on infiltration and bioretention. Post-construction BMPs are determined in the design phase of a project using the standards and specifications which are approved by DCR each year. VDOT staff explained that typically VDOT does not allow BMPs to be within its right-of-way, and VDOT does not typically accept BMPs from private developments, though they do accept the roadway itself and maintenance responsibilities for the roadway.

Permit Section II.B.5.b(5) (Site Inspection for Structural Stormwater Management Facilities) – Section II.B.5.b(5) of the Permit requires VDOT to conduct site inspection of post-construction stormwater management facilities and to enforce measures consistent with the Virginia Stormwater Management Act (Stormwater Act) and attendant regulations. Chapter 60 of the Virginia Stormwater Management Program (4VAC50-60-20) provides a framework for the administration, implementation and enforcement of the Stormwater Act.

4VAC50-60-200. Administrative procedures: maintenance and inspections.

A. Responsibility for the operation and maintenance of stormwater management facilities shall, remain with the state agency and shall pass to any successor or owner. If portions of the land are to be sold, legally binding arrangements shall be made to pass the basic responsibility to successors in title. These arrangements shall designate for each state project the property owner, governmental agency, or other legally established entity to be permanently responsible for maintenance.

B. At a minimum, a stormwater management facility shall be inspected by the responsible state agency on an annual basis and after any storm which causes the capacity of the facility principal spillway to be exceeded.

BMP 5C of the *VDOT SWMP, Part II – Implementation Plan* states that VDOT's goal is to perform yearly inspections and required maintenance on stormwater management facilities during Permit Years 1 through 5.

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

Permit Section II.B.5.b(5), Site Inspection for Structural Stormwater Management Facilities (continued)

Section 11.3.10, *Maintenance*, of the VDOT Drainage Manual states:

> VDOT maintenance procedures include inspecting each stormwater management facility on a semiannual basis, and inspecting each stormwater management facility after any storm that causes the capacity of the principal spillway to be exceeded. Basins should also have accumulated sediment removed about every 5 to 10 years.

Observation 21: The VDOT Stormwater Program Administrator (Mr. Roy Mills) explained that the "semiannual" inspection frequency requirement included in the VDOT Drainage Manual (Appendix 6, Item No. 15.B) was no longer accurate and was based on the requirements in VDOT's previous MS4 permit. VDOT staff explained that VDOT inspects permanent stormwater management facilities on an annual basis and conducts maintenance as needed.

Observation 22: According to VDOT staff, at the time of the on-site inspection, VDOT owned and maintained 618 post-construction BMPs within the MS4 urbanized areas. VDOT staff explained that VDOT Maintenance Division representatives typically conduct inspections of the post-construction BMPs during the winter season. The VDOT Maintenance Program Manager (Mr. Morris Walton) explained that inspection and maintenance activities are tracked in each district and the information is compiled into a centralized Microsoft Access database each year. The database was originally created by USACE.

Observation 23: During the on-site inspection, the EPA Inspection Team met with the VDOT Roadside Manager (Mr. Jerry Prine) and VDOT Vegetation Specialist (Ms. Debbie Lee) for the Hampton Roads District to discuss VDOT's post-construction BMP inspection and maintenance process. The Mr. Jerry Prine explained that VDOT Hampton Roads District started conducting annual BMP inspections in 2005 and the Hampton Roads District developed a post-construction BMP manual which has been adopted statewide. The document was provided by VDOT in response to Records Request Item No. 32 (Appendix 5). The document is titled "HR Storm, A Guide for Maintaining and Operating BMPs" (Appendix 6, Item No. 32.A).

Mr. Prine added that VDOT started using the Microsoft Access-based electronic database for tracking BMP inspections about one year prior to the inspection, and previously used hardcopy forms which were entered into a Microsoft Excel spreadsheet.

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

Permit Section II.B.5.b(5), Site Inspection for Structural Stormwater Management Facilities (continued)

The EPA Inspection Team and VDOT staff visited stormwater management basin No. 13409 adjacent to the Indian River Road Park-n-Ride Lot on October 25, 2012. Evidence of erosion was present beneath two of the inlets to the basin (Appendix 9 - Photographs 9 through 14). This issue was noted in an inspection report for the basin dated April 13, 2011. VDOT staff explained VDOT's inspection process and its system of rating various aspects of the BMP based on its apparent condition and performance on a scale of one to five, with one standing for "operating as designed" and five standing for not functional. On the April 13, 2011 inspection record, the "Inlet, Inlet Channel and Forebay" were given a rating of "1" though the presence of erosion at one or more inlets into the basin was noted. There was no information that identified when corrective action would be taken in response to an observed BMP conditions.

Observation 24: The EPA Inspection Team requested a copy of VDOT's inspection and maintenance records for post-construction BMPs / structural stormwater management facilities for the past three years in urbanized areas. In response, VDOT provided the Microsoft Access-based database titled "VDOT SWM Database" (see Appendix 6 Item No. 17.A). VDOT identified this database in its response to the EPA Records Request as a "database used to record inspection and maintenance records for post-construction BMPs." In addition, VDOT provided the PDF versions of scanned inspection records titled "Richmond District Inspections" (see Appendix 6 Item No. 17.B). VDOT identified this record in its response to the EPA Records Request stating, "The Richmond District BMPs have not been entered into the database system [VDOT SWM Database]. Therefore, VDOT has supplied scanned copies of the originals [inspection records]."

Observation 25: The "VDOT SWM Database" contains a table titled "Inspection Table" which identifies information pertinent to post-construction BMP inspections, including: (1) a BMP SWM identification number, (2) BMP inspection date, (3) inspector name, (4) BMP ratings, and (5) additional maintenance items to be addressed.

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

Permit Section II.B.5.b(5), Site Inspection for Structural Stormwater Management Facilities

Observation 26: During review of the "VDOT SWM Database, the EPA Inspection Team noted that the earliest inspection identified in the database was March 1, 2011.

Information presented to the EPA Inspection Team did not indicate whether post-construction BMP inspections had been conducted and documented during the entire three-year period prior to the inspection conducted by the EPA Inspection Team. In addition, the EPA Inspection Team randomly selected 10 post-construction BMPs from the VDOT SWM Database. Multiple post-construction BMPs did not have recorded entries for inspections for each year. Table 5 provides information on the review of the 10 post-BMPs:

Table 5. Summary of Post-construction BMP Inspection Frequency Review

SWM ID#	Dates of Inspection	Inventory Date
47011	3/21/2011	7/16/2010
	11/14/2012	
95005	3/19/2012	3/17/2011
29080	11/18/2011	3/22/2011
99009	4/18/2011	7/28/2010
	11/5/2012	
12203	3/14/2011	7/13/2010
60-114-08.3	3/5/2012	3/2/2011
53008	11/30/2011	3/22/2011
20034	Not in database – Located in Richmond District	3/7/2011
76113	11/17/2011	3/22/2011
001050	12/9/2011	3/22/2011

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM (continued)

Observation 27: Post-construction BMP inspection are kept separately from the main VDOT SWM Database. The "Richmond District Inspections" records were reviewed. The earliest post-construction BMP inspection date listed in the "Richmond District Inspections" records was March 14, 2011.

Permit Section II.B.5.b(6), Tracking of Permanent Stormwater Management Facilities – Section II.B.5.b(6) of the Permit requires VDOT to do the following:

> Track all known permanent stormwater management facilities that discharge to the regulated small MS4 and submit information that includes: the type of structural storm water management facility, geographic location (HUC), impaired surface water that the stormwater management facility is discharging into, and number of acres treated.

Page 6 of the *VDOT SWMP, Part I – MS4 Program Plan* identifies that VDOT will maintain an updated electronic database of all known VDOT-owned and operated structural stormwater management facilities.

BMP 5C of the *VDOT SWMP, Part II – Implementation Plan* states that Location and Design (L&D) Division will continue to maintain the pre-construction databases related to stormwater structures. Maintenance Division will continue field verification of existing stormwater structures.

Observation 28: The EPA Inspection Team requested a copy of the tracking database and in response, VDOT provided an electronic copy of a database titled "VDOT SWM Database." The database includes a table titled "Inventory Table" which identifies information regarding each post-construction BMP, including: (1) BMP SWM identification number, (2) inventory date for each BMP, (3) BMP type, (4) BMP location information, (5) parties responsible for maintenance, (6) maintenance partners, (7) VDOT district, (8) jurisdiction, and (9) additional notes. In addition, the database includes a table for documenting post-construction BMP inspections. Review of the VDOT SWM Database indicated that the database did not include information regarding the number of acres treated by each post-construction BMP, and whether the BMP discharged to an impaired waterbody. VDOT staff explained that the VDOT Maintenance Division in responsible for the VDOT SWM Database.

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The Permit requires VDOT to develop and implement an operation and maintenance program consistent with the MS4 Program Plan that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

Maintenance Facility Inspections Conducted as a Component of the Inspection – On Monday, October 22, 2012 through Thursday, October 25, 2012 the EPA Inspection Team conducted facility inspections of nine VDOT maintenance facilities throughout four VDOT Districts— District No. 4 (Richmond), District No. 5 (Hampton Roads), District No. 6 (Fredericksburg), and District No. 9 (Northern Virginia).

The purpose of the facility inspections was to assess the Permittee's oversight activities for maintenance facilities and document site conditions. During the facility inspections, the EPA Inspection Team walked the facilities with VDOT staff and VDOT consultant representatives. Table 6 identifies the maintenance facilities that were inspected as a component of the MS4 inspection.

Table 6. Maintenance Facility Inspections

Facility Name	VDOT District	Inspection Date
Chester Area Headquarters	District No. 4 (Richmond)	10/23/2012
Richmond District Complex	District No. 4 (Richmond)	12/22/2012
Expressway Area Headquarters	District No. 5 (Hampton Roads)	10/24/2012
Pine Chapel Area Headquarters	District No. 5 (Hampton Roads)	10/24/2012
Wards Corner TAMS Facility	District No. 5 (Hampton Roads)	10/25/2012
Falmouth Area Headquarters	District No. 6 (Fredericksburg)	10/22/2012
Fredericksburg District Office	District No. 6 (Fredericksburg)	10/23/2012
Reston Area Headquarters	District No. 9 (Northern Virginia)	10/24/2012
Chantilly Area Headquarters	District No. 9 (Northern Virginia)	10/25/2012

The EPA Inspection Team made multiple observations regarding pollution prevention and good housekeeping for the facilities. Detailed observations and photographs from the facility inspections are presented in individual site visit reports included as Attachments L through T.

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (continued)

Permit Section II.B.6, Pollution Prevention/Good Housekeeping for Municipal Operations – The Permit requires the Permittee's pollution prevention/good housekeeping program to include a training component to prevent or reduce pollutant runoff from municipal operations. Furthermore, Section II.B.6 requires VDOT to do the following:

> Identify, implement, evaluate and modify, as necessary, BMPs to meet the following pollution prevention/good housekeeping measureable goals for municipal operations:
>
> a. Operation and maintenance programs including activities, schedules, and inspection procedures shall include provisions and controls to reduce pollutant discharges into the regulated small MS4 and receiving surface waters.
> b. Illicit discharges shall be eliminated from storage yards, fleet or maintenance shops, outdoor storage areas, rest areas, waste transfer stations, and other municipal facilities.
> c. Waste materials shall be disposed of properly.
> d. Materials that are soluble shall be protected from exposure to precipitation.
> e. Materials, including but not limited to fertilizers and pesticides, that have the potential to pollute receiving surface waters shall be applied according to manufacturer's recommendations.

Page 6 of the *VDOT SWMP, Part I – MS4 Program Plan* requires VDOT to do the following:

> Conduct, at a minimum, annual inspections of District Facilities to ensure that pollution prevention practices are implemented. Records of these inspections are to remain on file at the inspected facility.

Page 28 of the *VDOT SWMP, Part II – MS4 Part II Implementation Plan* requires VDOT to do the following:

> Develop/revise protocols and tracking procedure for performing environmental compliance assessments of Maintenance Facilities

Observation 29: The EPA Inspection Team requested copies of maintenance facility inspection records for the past three years (i.e., October 2009 through October 2012) for inspections performed for stormwater pollution prevention and good housekeeping at VDOT maintenance facilities visited during the EPA field inspection. In response, VDOT provided draft inspection reports for assessments of VDOT facilities that a VDOT consultant, EEE Consulting, Inc. conducted during May and June 2012 (Appendix 6, Item Nos. 24 and 38). In addition, VDOT provided maps created by EEE Consulting, Inc., showing points of discharge, regulated outfalls, and storm sewer systems for maintenance facilities visited by the EPA Inspection Team (Appendix 6, Item No. 25).

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Permit Section II.B.6, Pollution Prevention/Good Housekeeping for Municipal Operations

Observation 29: (continued)

VDOT did not provide documentation of facility inspections conducted prior to May 2012. No records were available or provided since the EPA inspection, that indicate that VDOT had performed and documented annual self-inspections for stormwater pollution prevention at its maintenance facilities (e.g., residencies, area headquarters), aside from those inspections conducted by EEE Consulting, Inc. in 2012.

Subsequent to the on-site inspection, copies of the EEE Consulting, Inc. inspection reports were provided to the EPA Inspection Team (Appendix 6, Item No. 24).

Observation 30: Facility personnel at the Fredericksburg District Headquarters explained that an annual district-wide "housekeeping" inspection is conducted at all district fixed facilities. However, during the visit to the Fredericksburg District Headquarters, inspection records were not available for review. VDOT staff stated that the most recent annual housekeeping inspection was conducted at the Fredericksburg District Headquarters in June 2012. In response to the EPA Inspection Team's request, VDOT provided the 2012 annual housekeeping inspection record for the facility (Appendix 6, Item No. 44.B). Based on a review, the inspection was primarily related to safety concerns and did not have a specific component pertaining to stormwater pollution prevention.

Observation 31: Facility personnel at the Reston Area Headquarters explained that district inspectors conduct a facility inspection annually. VDOT staff explained that the inspection results and corrective actions are summarized in a full compliance report for the Fairfax, VA area. At the time of the EPA inspection, VDOT personnel were unable to produce documentation of the annual inspection. The EPA Inspection Team also requested the VDOT Main Office for records of the annual inspection conducted at the facility, but no records were provided (Appendix 6, Item No. 45.A).

Observation 32: The EPA Inspection Team noted that the VDOT maintenance facilities were not covered under the Virginia Pollutant Discharge Elimination System (VPDES) Industrial Stormwater Permit (VAR05; hereinafter, the Industrial General Permit).

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Permit Section II.B.6, Pollution Prevention/Good Housekeeping for Municipal Operations

Observation 32: (continued)

VDOT staff explained that an agreement had been formalized between VDOT and Virginia DEQ stating that VDOT maintenance facilities do not require coverage under the Industrial General Permit.
In response to the EPA Inspection Team's inquiry, VDOT provided a document titled "DEQ VPDES Memo" (Appendix 6, Item No. 23.A). The document is a letter from Virginia DEQ to VDOT dated July 23, 1993. The letter explains that VDOT sent a list of VDOT maintenance facilities and completed construction sites to Virginia DEQ in June 1993 and requested that the Notices of Intent (NOIs) for the facilities be withdrawn. The letter states that the "NOI's for the referenced facilities have been removed from the general permit coverage process and are being returned to you [VDOT] with this letter." The letter states that this decision was "based upon your [VDOT's] determination that these facilities are not required to obtain coverage under a storm water discharge permit." The letter does not specify which facilities were exempted from this process.

Observation 33: At the time of the EPA inspection, plans for preventing stormwater pollution were not available, nor provided, for VDOT maintenance facilities.

Observation 34: The EPA Inspection Team requested stormwater pollution prevention training information from VDOT maintenance facilities representatives during multiple the EPA field inspection. The VDOT District Maintenance Engineer (Ms. Marcie Parker) at the Fredericksburg District Offices explained that several weeks prior to the EPA inspection, MS4 training and an associated PowerPoint presentation was provided to facility staff; however, written documentation of that training was not available, nor provided.

Facility personnel at both the Reston and Chantilly Area Headquarters explained that the MS4 training had been scheduled for facility staff the week prior to the EPA inspection; however, those training sessions had been cancelled. VDOT provided a copy of the PowerPoint training presentation titled "Facility_IDDE_Presentation" in the VDOT Response Inventory (Appendix 6, Item No. 44C).